LEMON GROVE CITY COUNCIL AGENDA ITEM SUMMARY

Item Noltem 4 Mtg. DateNovember 20, 2018 DeptPublic Works	
Item Title: Palm Street Red Curb	
Staff Contact: Mike James, Assistant City Man	ager / Public Works Director
Recommendation:	
Receive report and provide feedback to staff.	
Item Summary:	
In 2018, residents and the Sheriff's Department sight distance for vehicles traveling south on city intersections. These sight distance concerns presight distance and safety at the multiple locations	streets intersecting with Palm Street at multiple rompted the Engineering Division to assess the
The staff report (Attachment A) provides addition study was performed, and staff's final recomment of staff's presentation, staff requests that the City about staff's recommended follow up action.	dation that was implemented. At the conclusion
Fiscal Impact: None.	
Environmental Review:	
Not subject to review	Negative Declaration
Categorical Exemption, Section	Mitigated Negative Declaration
Public Information:	
☐ None ☐ Newsletter article	Notice to property owners
☐ Notice published in local newspaper	Neighborhood meeting
Attachments:	
A. Staff Report	
B. Overhead Image and Site Photographs	
C. City and Rick Engineering Company Comparison	

LEMON GROVE CITY COUNCIL STAFF REPORT

Item No. <u>Item 4</u>

Mtg. Date November 20, 2018

Item Title: Palm Street Red Curb

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Background:

In 2018, residents and Sheriff's Department staff expressed concerns regarding the vehicle sight distance for vehicles traveling south on city streets intersecting with Palm Street at multiple intersections. Specifically, there were four intersections with Palm Street that were identified and they were Myra Street, Washington Street, Dennis Lane, and Palm Lane (**Attachment B**).

These sight distance concerns, excessive speed complaints and recent traffic collisions on Palm Street prompted the Engineering Division to assess the sight distance and safety concerns at the four locations. The Engineering Division conducted field visits to the intersections in question, which was followed by an analysis utilizing design standards from the California Department of Transportation Highway Design Manual (Design Manual).

The Design Manual utilizes two types of sight distances for intersections: corner sight distance and stopping sight distance. Both are defined below:

- Corner sight distance is a distance that provides motorists 7.5 seconds of line of sight for the driver on the crossroad to complete the necessary maneuver while the approaching vehicle travels at the assumed design speed of the roadway. Based on Chapter 400, Topic 405, Table 405.1A, the corner sight distance for a 40 mile per hour roadway is 440 feet.
- Stopping sight distance is a distance that the average operator of a motor vehicle needs to be able to see an object and stop before colliding with said object. Based on Table 201.1 of Chapter 200 of the California Highway Design Manual, the design stopping sight distance is 300 feet.

In this analysis, the City used the Design Manual's stopping sight distance criteria to ensure that the operator of the motor vehicle at the stop signs at Myra Street, Washington Street, Dennis Lane, and Palm Lane can maneuver and still leave the eastbound and westbound motorist on Palm Street enough time to make a decision. To explain why stopping sight distance was used, staff referred to Topic 405. In this specific example, obtaining the approximate corner sight distance would require removing portions of private property (e.g. trees, walls) and would burden the City with excessive costs for construction and right-of-way acquisition. If excessive costs are associated with obtaining corner sight distance, then the corner sight distance shall be equal to the stopping sight distance. The final recommendation by the Contract City Engineer to complete this analysis was to use the stopping sight distance in order to calculate the minimum length of red curb at each intersection.

The results of the analysis was shared via field visits from the Engineering Division staff. The actual work to paint the red curb along Palm Street was performed by the City's contractor, who also paved the westbound lanes of Palm Street from Golden Avenue to Skyline Drive.

Discussion:

Following the curb painting, the City Council heard concerns voiced from residents who were impacted by the red curb painting on Palm Street. Most recently, this occurred on October 2, 2018 when residents shared their concerns and comments that their safety was negatively impacted by:

- Not being able to park in front of their residence,
- Limited space to walk and park,
- There is a new safety issue with parking on the south side of Palm Street and walking across the street.
- · There is no sidewalk on Palm Street,
- · Packages are now being stolen from the front of homes, and
- Comments that the Design Manual was not the only method in which red curb distances could be measured and in some instances, the actual distance did not have to be followed.

In light of these new concerns brought from the local residents, city staff requested Rick Engineering Company to perform a second analysis to either confirm or amend the previous recommendations. In that analysis, Rick Engineering Company's Traffic Division performed an independent analysis and concluded that all four of the recommended red curb lengths were too long. The table below identifies city staff's recommendation and Rick Engineering Company's recommendation.

Intersection	Original Red Curb Length	Recommended Red Curb Length	Minimum Linear Foot Decrease
Myra @ Palm	88 feet	64 feet	-24 feet
Washington @ Palm	92 feet	66 feet	-26 feet
Dennis @ Palm	95 feet	52 feet	-43 feet
Palm Ln @ Palm	108 feet	88 feet	-20 feet

Based on the second analysis performed by Rick Engineering Company, the new lengths are less than the previous and staff is now recommending that the length of the original red curb be reduced to meet minimum lengths for site distance safety. The primary reasons for the adjustment in lengths to red curb include:

- Location of a vehicle at the stop bar/limit line,
- Correct line of sight of the vehicle,
- Driveway locations in the no parking zone, and
- Parked vehicles limiting the line of site of moving vehicles.

In **Attachment C**, the images shown compare city staff's recommendation and Rick Engineering's recommendation. On average, the decrease in red curb at all four intersection is 28 feet per intersection. With a total decrease of 113 feet, there will be approximate 7 parking spaces (at an average of 15 feet per parking space) added to the north side of Palm Street.

Field Recommendations:

Based on the quantitative analysis performed by Rick Engineering Company, staff recommends that the new lengths are changed in the field as soon as possible. Should the City Council decide to not change the reduction in red curb linear feet, there is likely little to no increase to the City's liability for requiring an additional site distance to prevent vehicle collisions from occurring at the four intersection. However, this may set a precedent of not following the Design Manual's minimum safe distance calculation for site distance with future requests that the City's Traffic Advisory Committee may hear.

In light of the public comment received in October, staff also took note of a smaller segment on the south side of Palm Street near the intersection of Golden Avenue that may be changed from red curb to gray curb (open for parking). This specific location was painted red at the same time as the red curb on the north side of the street because it contained red faded paint. Upon further review, staff recommends that this red curb paint be removed. With its removal, there is an additional 200 linear feet (or 13 parking spaces) that will be available to Palm Street residents to park their vehicles.

Conclusion:

That the City Council receive the report and provide direction to city staff.

Overhead Image and Intersection Photographs



Myra Street at Palm Street



Washington Street at Palm Street



Dennis Lane at Palm Street



Palm Lane at Palm Street



Myra Street at Palm Street





Washington Street at Palm Street





Dennis Lane at Palm Street





Palm Lane at Palm Street



